DOCUMENT RESUME

ED 397 270 CE 072 113

AUTHOR	Brown, James M.; Pucel, David J.
TITLE	Minnesota Tech Prep Consortia Evaluation System. 1993/94 Cohort Self-Assessment Summary Report.
INSTITUTION	Minnesota Univ., St. Paul. Minnesota Research and Development Center for Vocational Education.
SPONS AGENCY	Minnesota State Dept. of Education, St. Paul.; Minnesota State Technical Coll. System, St. Paul.
PUB DATE	95
NOTE	89p.; For the 1994/95 summary report, see CE 072 114.
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Articulation (Education); Consortia; Curriculum; *Educational Assessment; High Schools; Integrated Curriculum; Marketing; Postsecondary Education; Professional Development; Program Effectiveness; Program Evaluation; Pupil Personnel Services; School Business Relationship; School Counseling; *Self Evaluation (Groups); State Programs; Statewide Planning; Student Evaluation; Student Personnel Services; *Tech Prep
IDENTIFIERS	Minnesota

ABSTRACT

This report summarizes the comprehensive, written self-assessments comleted by seven Minnesota tech prep consortia. The 1993-94 cohort of consortia was the first group to use the self-assessment. Within each tech prep consortium, the evaluation was completed by cross-district teams of teachers, administrators, and others who had been trained by the Minnesota Research and Development Center for Vocational Education. The summary is divided into four sections: curriculum and instruction, marketing, student assessment, and evaluation. Each section includes descriptions of the following areas: overall planning, staff development, special populations, curriculum integration, articulation, partnerships, evaluation, and retrospective. The report also contains the results of a brainstorming session in which participants shared successful and unsuccessful practices related to each section of tech prep. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 397 270

Minnesota Tech Prep Consortia Evaluation System

1993/94 Cohort Self-Assessment Summary Report

Principal Investigators:
James M. Brown
and
David J. Pucel

Research Assistants:
Rebecca R. Johnson
and
K. Peter Kuchinke

© 1995

Minnesota Research and Development Center
Department of Vocational and Technical Education
1954 Buford Avenue
R460 Vocational Education Building
University of Minnesota
St. Paul, Minnesota 55108
612-624-1214

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Supported by
A Partnership of the
Minnesota Department of Education
and the
Minnesota Technical College System
550 Cedar, St. Paul, Minnesota 55101

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

K Kuchinke

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE 072 113

BEST COPY AVAILABLE

Minnesota Tech Prep Consortia Evaluation System

1993/94 Cohort Self-Assessment Summary Report

Table of Contents

Section I : Introduction 1

Section II: Self-Assessment Summary 7

Curriculum and Instruction

- Overall Planning 9
- Staff Development 11
- Special Populations 13
- Curriculum Integration 15
- Articulation 17
- Partnerships 19
- Evaluation 21
- Retrospective 23

Marketing

- Overall Planning 25
- Staff Development 27
- Special Populations 29
- Curriculum Integration 31
- Articulation 33
- Partnerships 35
- Evaluation 37
- Retrospective 39

Student Assessment and Evaluation

- Overall Planning 43
- Staff Development 45
- Special Populations 47
- Curriculum Integration 49
- Articulation 51
- Partnerships 53
- Evaluation 55
- Retrospective 57

—continued

MRDC, University of Minnesota © 1994

Support Services and Counseling
Overall Planning....59
Staff Development....61
Special Populations....63
Curriculum Integration....65
Articulation....67
Partnerships....69
Evaluation....71
Retrospective....73

Overall Planning—Retrospective....75

Section III: Peer Brainstorming Session....79

MRDC, University of Minnesota © 1994

Section I

Minnesota Tech Prep Consortia Evaluation System

1993/94 Cohort Self-Assessment Summary Report

Introduction

MRDC, University of Minnesota © 1994

Introduction

During the summer of 1994, seven Minnesota Tech Prep consortia completed comprehensive, written self-assessments, reporting on the status of Tech Prep on a consortium-wide basis. The self-assessment forms an integral part of the Minnesota Tech Prep Consortia Evaluation System that has been designed by the Minnesota Research and Development Center for Vocational Education (MRDC). The MRDC is the independent, third-party evaluator of Tech Prep in Minnesota, under contract by the Minnesota Technical College System. The self-assessment is completed by each consortium in its third year of implementation. The 1993/94 cohort was the first group to use the self-assessment, two other cohorts are scheduled to follow in 1995 and 1996.

Within each Tech Prep consortium, the self-assessment was completed by cross-district teams of teachers, administrators, and others who had been trained by the principal investigators of the MRDC. The self-assessment instrument consists of a number of specific questions addressing four **Tech Prep Systems:**

- Curriculum and Instruction
- Marketing
- Student Assessment and Evaluation
- Support Services and Counseling

Each Tech Prep System contains seven **Tech Prep Systems Activities:**

- Overall Planning,
- Staff Development,
- Special Populations
- Curriculum Integration
- Articulation
- Partnerships
- Evaluation

Each of the four Tech Prep Systems also asked for a retrospective thoughts about Tech Prep activities. For each cell of the resulting matrix of Systems and System Activities (see page 6), each consortium was asked to report on each of the three stages of the continuous improvement cycle: planning, implementation, and improvement.

The completed self-assessments were returned to the MRDC, reviewed for completeness, and content-analyzed to identify common and unique activities within and across consortia. A summary of responses across consortia was presented to representatives of the cohort who reviewed it for accuracy. Section II of this report contains a validated summary of the analysis

Because the self-assessment system was designed to encourage continuous improvement, the review of the summary by cohort members was followed by a Peer Brainstorming Session conducted by the MRDC. The Tech Prep coordinators and members of five of the seven consortia, Tech Prep leadership at the state level, and MRDC staff participated in the session. The participants reviewed the status of Tech Prep activities within their own consortium against the Cohort Summary Report which served as a peer group benchmark. Participants then brainstormed and shared successful and unsuccessful practices related to each section of Tech Prep which had been evaluated. The results of this session are contained in Section III of this report. The consortium representatives also provided feedback to the MRDC on the self-assessment summary and reporting process. This information will be used to improve the format and process of analyzing and summarizing the self-assessment information.

The content of the self-assessments reflected the variance among consortia in terms of size, amount of resources, experience with Tech Prep, and number of related or unrelated events that occurred during the reporting period. Despite the required effort of selecting and training teams, collecting information on a wide variety of Tech Prep related topics, and preparing a comprehensive written report, the self-assessment process was perceived as highly useful by many participants. The self-assessment process served as a focal point for reviewing all Tech Prep related activities from a system-wide perspective.

As this report is published, the training for the next group, comprising ten Minnesota Tech Prep consortia, is underway. Along with other initiatives, such as the frequent meetings of Tech Prep contact persons of all consortia in the state, this report provides a means for sharing the expertise of the first group of consortia, and helping guide the way for subsequent cohorts to build strong and successful Tech Prep programs throughout the state. For state-wide planning and evaluation purposes, this report forms the first data point in a series of longitudinal, qualitative

studies that will monitor the progress of Tech Prep implementation in Minnesota.

The Minnesota Tech Prep Self-Assessment System

In the self-assessment, each consortium reported on the planning, implementation, and improvement activities related to Tech Prep for each of four Tech Prep Systems and seven Tech Prep Systems Activities. The resulting matrix is shown on the following page. Section II of this report summarizes the responses of the 1993/94 cohort across all seven participating consortia, and represents a summary profile or cohort benchmark. No single consortium is identified by name in this report. The page numbers printed in the matrix cells refer to Section II.

TECH PREP - FRAMEWORK FOR SELF-ASSESSMENT

		TECH PREP SYSTEMS			
		CURRICULUM & INSTRUCTION Section II pp. 9-24	MARKETING Section II pp. 25-42	STUDENT ASSESSMENT & EVALUATION Section II pp. 43-58	SUPPORT SERVICES & COUNSELING Section II pp. 59-74
	SYSTEM ACTIVITIES				
Retrospective	Overall Planning - Planning - Implementation - Improvement	p. 9	p. 25	p. 43	p. 59
	Staff Development - Planning - Implementation - Improvement	p. 11	p. 27	p. 45	p. 61
	Special Populations - Planning - Implementation - Improvement	p. 13	p. 29	p. 47	p. 63
	Curriculum Integration - Planning - Implementation - Improvement	p. 15	p. 31	p. 49	p. 65
	Articulation - Planning - Implementation - Improvement	p. 17	p. 33	p. 51	p. 67
	Partnerships - Planning - Implementation - Improvement	p. 19	p. 35	p. 53	p. 69
	Evaluation - Planning - Implementation - Improvement	p. 21	p. 37	p. 55	p. 71

MRDC, UNIV OF MN ©1995

BEST COPY AVAILABLE

Section II

Minnesota Tech Prep Consortia Evaluation System

1993/94 Cohort Self-Assessment Summary Report

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Curriculum & Instruction***
*System Activity - **Overall Planning***

Planning

Describe the mechanisms you planned for implementing the Tech Prep curriculum and instruction goals from your consortium's original strategic plan (e.g., committees, planning groups)?

Describe the overall goals, activity plans, and timelines with which you charged personnel assigned to develop the Tech Prep curriculum and instruction during the project.

Planning for implementation of curriculum and instruction goals was accomplished through broad-based coalition-building among secondary and post-secondary institutions, consortium leadership, representatives from business and industry, and the larger community. Membership and participation were encouraged and reinforced at conferences and workshops, through use of interactive telecom inservices, and, in one case, through a professionally developed video tape.

The overall goals were to develop and implement competency-based curricula that integrated academic and technical skills, and were relevant to labor market demands and work place readiness. The newly developed curricula were intended to reduce curricular overlap, instill the concept of continuous learning, and allow for advanced standing credit. Local planning was typically left to the individual districts with assistance from the consortium through frequent meetings and support for inservices and training.

MRDC, University of Minnesota © 1994

Implementation

Describe how the mechanisms, goals, activity plans, and timelines for Tech Prep curriculum and instruction were put in place among the institutions within your consortium?

Consortia used existing models of Tech Prep articulation, prioritized the development and implementation of applied academic courses, and used systems like the Minnesota Technical College Curriculum Model, the Application Driven Value Added Network for Career Enhancement (ADVANCE) model for general studies integration, or purchased and used materials from the Center for Occupational Research and Development (CORD). One consortium reported that a considerable amount of sharing of curricula and exchanging of staff between secondary and post-secondary levels facilitated and enabled the articulation of entire programs. Overall, articulation and integration are ongoing projects, and so is the revision and modification of curricula as implementation continues.

Continuous Improvement

How were you able to determine if the mechanisms, goals, activity plans and timelines set for the Tech Prep curriculum and instruction were reasonable; what data did you collect?

How are you using this information to develop new or revised overall goals and strategies for implementing the consortium's Tech Prep curriculum and instruction?

Curriculum and instruction activities were evaluated through feedback from counselors, teachers, administrators, and students. This information was used to measure the progress towards the stated goals, and to modify existing plans accordingly. Frequent reporting to consortium leadership was common. Goals and plans were modified and adapted as implementation unfolded. One consortium made use of the opportunity to include customized questions in the MN High School Follow-up System, another reported collaboration with CORD.

Consortia reported the need for greater emphasis on curriculum development and contextual teaching, authentic performance assessment, and improved linkages beyond the post-secondary level, such as developing youth apprenticeship programs with business and industry, and forming linkages with other consortia in the region. Curriculum and instruction were seen as primary goals for Tech Prep.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Curriculum & Instruction***
*System Activity - **Staff Development***

Planning

Describe the process your consortium used to determine staff development needs for addressing Tech Prep-related curriculum and instruction issues.

Describe the staff development activities your consortium planned to address Tech Prep-related curriculum and instruction issues.

Staff development needs were determined through collaboration between the consortium leadership, district management, and instructors. Staff development was voluntary, and based on identification of development needs through informal surveys of teachers and staff and an assessment of Tech Prep requirements.

Existing materials and programs used were from CORD, the Minnesota Technical College Curriculum Model, and the U.S. Department of Labor Secretary's Commission on Acquiring Necessary Skills (SCANS) reports.

Implementation (What was actually done?)

Describe the staff development activities your consortium conducted (provided) to implement Tech Prep curriculum and instruction during the project.

Staff development activities took place in form of attendance at national, state, or regional conferences, workshops, and seminars; joint inservices with post-secondary staff; meetings, tours, or site visits with business and industry and community service groups; and networking among member districts, other consortia, and Tech Prep sites out-of-state. Staff development included teachers, counselors, and other staff, and addressed Perkins regulations, integration of applied academics, articulation processes, and coordination of Tech Prep with other Perkins initiatives.

Specific events included: The annual Tech Prep conference, visits to Tech Prep sites in Oregon and North Carolina, the MN business partnership conference,

local Principals' Association meetings, the hiring of a consultant for SCANS, and the use of ADVANCE documents.

Continuous Improvement

How were you able to determine if the Tech Prep curriculum and instruction staff development activities were successful; what data did you collect?

How are you using this information to develop new or revise staff development activities for implementing Tech Prep curriculum and instruction?

Evidence of successful staff development was collected in form of direct measures (increased participation in training, feedback from faculty and staff), and indirectly through expansion of Tech Prep programs and feedback from students, parents, and teachers.

The data collected were attendance at staff development events and related meetings; utilization rates of Tech Prep materials; completion of a counselor handbook; expansion of programs; feedback from students, faculty, and parents; and the number of interdisciplinary efforts, articulation agreements, and business partnerships.

Areas for improvement centered on continued and ongoing staff development; system-wide development (as opposed to the development of individual teachers); training of new instructors; access to an existing experience base by new Tech Prep schools; release of staff from regular duties to attend inservices; and expansion of input from all stakeholders, including the use of experienced practitioners as inservice trainers. Specific topics to be addressed in the future include career clusters and upward mobility through clusters; non-traditional occupations; better career exploration K-12; writing outcomes; developing rubrics and conducting assessments; and access to applied studies and developmental skills of higher education partners.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Curriculum & Instruction***
*System Activity - **Special Populations***

Planning

Describe how your consortium planned curriculum and instruction strategies for the inclusion of special populations in your Tech Prep programs.

Describe the curriculum and instruction approaches your consortium selected to provide for the inclusion of special populations in your Tech Prep programs.

Planning was conducted through meetings with special education districts and special needs staff, and reviews of literature. Goals included increasing participation of special populations in Tech Prep through teaching strategies and tutors, modification of curricula, and improved access to support services for special populations.

Specific initiatives were: Identification of special needs students through IEP's, application of research findings from the Southern Regional Governor's Education Conference, focus on Work-Readiness Curriculum, career counseling, gender equity inservices, and a focus on developmental education courses and individualized curricula.

Implementation (What was actually done?)

Describe how the selected curriculum and instruction approaches for the inclusion of special populations in Tech Prep programs have been implemented throughout your consortium.

Special population representatives were actively involved in every major step of curriculum development. Through team teaching, individualized instruction, and counseling, special population students were integrated into Tech Prep programs. Special care was taken to avoid labeling Tech Prep participants as inferior to those in college prep programs. The goal was the inclusion of all

students. Most consortia addressed the coordination of Tech Prep activities with other Perkins initiatives.

One consortium used Dr. Bottoms as a resource and developed a working model for integration of special population students. This consortium also coordinated student placement with a Native American school liaison person.

Continuous Improvement

How were you able to determine if the selected curriculum and instruction approaches led to the inclusion of special populations in your Tech Prep programs? What data did you collect?

How are you using this information to improve curriculum and instruction for the inclusion of special populations in your Tech Prep programs?

Data were collected primarily on student enrollment in Tech Prep courses. Improvements are planned in areas of curriculum modification to meet the needs of EBD and LD students; staff training; monitoring of success of special populations as Tech Prep expands; a stronger emphasis on identification of good career choices for special populations; improved cooperation between special needs and regular faculty; training regular faculty to recognize the different learning styles of special needs students; and the development of a better outcome evaluation and performance-based assessment system.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Curriculum & Instruction***
*System Activity - **Curriculum Integration***

Planning

Describe the planning process your consortium used to address the need for integration of academic and vocational course content in the Tech Prep programs.

Describe the methods and procedures your consortium selected for integrating academic and vocational content in Tech Prep curriculum and instruction.

The planning process included coordination of activities among consortium leadership, curriculum planning committees, and staff. Teachers from academic and vocational areas met and received inservice training on course integration. Some consortia conducted surveys of business and industry needs and involved members of the larger community. Based on a successful pilot, one consortium selected the CORD curriculum, another hired an educational consultant to serve as a liaison between academic and vocational staff.

Implementation (What was actually done?)

Describe how curriculum integration was implemented in the schools throughout your consortium.

Curriculum integration was an ongoing process in most consortia. Consortia experimented with several models and used pilot projects or sites. Curriculum integration was seen as costly, and the level of funding and available resources dictated the speed of integration. In all instances, integration initiatives resulted in improved communication among school sectors, school levels, and the community at large. All consortia had some integrated course in place. Special attention was paid to SCANS skills and the MN Graduation Rule.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the curriculum integration approaches you chose were appropriate for the integration of academic and vocational content in your Tech Prep programs? What data did you collect?

How are you using this information to improve curriculum integration in your Tech Prep programs?

The number of integrated courses, enrollment in those courses, and informal feedback from students and staff were measured by all consortia. Integration is seen as critical, but resource-intensive, and the major barrier is the lack of resources, funds, and a solid process model of curriculum integration. There are many barriers to team teaching, yet the overall premise of integration is accepted by students and staff. Of primary importance to continued integration are the expansion of the number of integrated curricula, cooperation with other consortia, and further involvement of business and industry.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Curriculum & Instruction***
*System Activity - **Articulation***

Planning

Describe the process used to plan curriculum articulation across secondary and post-secondary institutions in your consortium?

Describe the articulation strategy your consortium selected to address curriculum articulation within the Tech Prep programs.

The primary processes used were cooperative meetings among secondary and post-secondary teachers, counselors, and staff. Some consortia included business and industry representatives and other community members. One consortium has proposed to employ a planner and curriculum specialist to coordinate activities and identify needed curriculum articulation. Another used an established model to articulate curriculum between a large number of high schools and the technical college. Two consortia collaborated on SCANS general studies using the ADVANCE documents.

Implementation (What was actually done?)

Describe how Tech Prep curriculum was articulated across secondary and post-secondary institutions in your consortium.

All consortia held inservices for staff, instructors, and counselors regarding articulation; they also held joint meetings, and identified curricula and career programs for articulation. These included comparison of content and materials, processes to measure core skills proficiencies, sharing evaluation tools and teaching strategies, and identification of advanced standing credit options. Modification of curriculum and articulation were an ongoing process.

One consortium had portfolios of secondary work sent to college instructors for final review and credit. Others used the Minnesota Technical College Curriculum Model or the ADVANCE documents to facilitate curriculum comparison.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if curriculum articulation between secondary and post-secondary institutions was successfully implemented in the schools in your consortium? What data did you collect?

How are you using that information to improve curriculum articulation in your Tech Prep programs?

The number of articulated courses and college credits earned in secondary programs have been identified. At present, the number of students in articulated programs is still small. The data are used to continuously monitor and adjust programs, and justify continued support and communication among partners. Articulation efforts should include specific requirements for core skills for incoming students in each program, and validation by business and industry.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Curriculum & Instruction***
*System Activity - **Partnerships***

Planning

Describe the planning process you used to insure the participation of the full range of stakeholders in the design of Tech Prep curriculum and instruction.

Describe the major components of your designed plan to ensure that important stakeholder groups were involved in the selection or development of Tech Prep curricula.

Planning processes included the participation of a full range of stakeholders at consortium leadership, committee, and district levels to ensure representation. Participation in Tech Prep was sought through informal meetings and contacts, and media releases for parents, community, staff, and business and industry. Once formed, the various committees received extensive inservice training and continuous information about progress of the project.

Implementation (What was actually done?)

Describe how stakeholder groups were involved in designing or selecting Tech Prep curricula in the schools in your consortium.

Various committees surveyed existing business needs, identified corresponding curricula, and developed Tech Prep program plans. Participation of all stakeholders assured relevance of Tech Prep. Collaboration and partnerships were enforced through inservices, site visits, networking, conferences, team teaching, and sharing of materials.

One consortium followed a partnership model developed previously for youth apprenticeship planning. Other consortia used grant money to form alliances with business partners who participated in articulation and program integration.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine whether the participation of stakeholders in the Tech Prep curriculum design process was successful? What data did you collect?

How are you using this information to improve the participation of stakeholders in the future revision of Tech Prep curricula?

There is little "hard" data, but much informal information about the success and acceptance of partnership models. Exchanges between business and industry and education are welcomed by both sides. Meeting records show broad-based participation and support. This broad involvement should continue on an ongoing basis and must be nurtured. Identification of roles and expectations of each partner is essential, especially for continued participation by industry. Joint meetings must be carefully organized and task focused.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Curriculum & Instruction***
*System Activity - **Evaluation***

Planning

Describe the process your consortium used to plan for the evaluation of Tech Prep curriculum and instruction?

Describe the processes developed by your consortium to evaluate the adequacy and appropriateness of the Tech Prep curriculum and instruction.

The evaluation process was monitored by the consortium leadership. Planning for evaluation varied widely. While some consortia had developed extensive evaluation systems at several levels (students, parents, industry, comparison of Tech Prep and Non-Tech Prep at secondary and post-secondary levels), others used outside consultants, the MN 2000 format, or the State Evaluation System. Evaluation plans focused on student participation and program characteristics, such as the number of courses, the number of articulation agreements in place, and the responsiveness of curriculum to students' and business and industry needs.

Implementation (What was actually done?)

Describe how these evaluation strategies were implemented in the schools throughout your consortium?

Evaluations in use include follow-up studies on students with advanced standing, math pre/post tests, and program and student characteristics. Also in use are the MN High School Follow-up System and MN 2000. Many consortia reported the use of informal teacher and student evaluations, as well as data collection on program participation, documentation of advanced standing credit earned, and number of advanced standing credit students enrolled in technical and community colleges.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine whether the curriculum and instructional evaluation approaches you implemented were successful? What data did you collect?

How are you using this information to improve the evaluation of Tech Prep curriculum and instruction throughout your consortium?

Data indicate satisfaction with teaching and learning strategies, decreased discipline problems, positive feedback from parents, and large increases in the number of students with advanced standing credits. There is also a noticeably higher competency level of students from 2+2 programs.

This information is used to promote Tech Prep, to drive further implementation and expansion, and revise and modify existing curricula, especially for special needs students. The information is also used in the yearly revision of articulation agreements. Much work needs to be done in this area, and more experience with evaluation is needed to be able to recommend improvements.

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

Retrospective - Curriculum & Instruction

Planning

What planning processes worked best for your consortium during the planning phase of designing Tech Prep curriculum and instruction?

Consortia experienced the most success with getting voluntary, rather than mandatory, participation from interested members; training teachers through hands-on workshops conducted by practitioners; collaboration of different levels of stakeholders from the beginning; evaluation of student needs; involvement of advisory committees; site visits; staff input; and participation of the greater community and business and industry. Inservice training for all groups helped build a common knowledge base for all participants.

Based on your experiences, what pitfalls would you caution a new consortium about when planning Tech Prep curriculum and instruction?

Career planning and the support of counselors were difficult to obtain, and so were funding and resources; micro-management from "the top" should be avoided; programs should be market-driven and based on student need; regular communication about available resources and support is important; training linked to college credit for teachers should be offered; and the concepts of Tech Prep should be communicated to all stakeholders.

Implementation

When implementing Tech Prep curriculum and instruction, in what areas of activity did you experience the greatest successes (ex., coordination, articulation, timelines)? Explain why you think this occurred.

Articulation was generally easy and generated much enthusiasm among all involved; communication among all stakeholders was welcomed and worked well; several successful Tech Prep courses achieved high visibility; the Minnesota Technical College Curriculum Model was used for curriculum design.

MRDC, University of Minnesota © 1994

Please describe the three of four greatest difficulties you have encountered in setting up curriculum and instruction for Tech Prep programs?

It was difficult for teachers, parents, and counselors to see the need for Tech Prep, Tech Prep is not yet accepted as an integral component in departments or schools, and has a "second rate" status. There is resistance by vocational teachers to applied academics; staff burn-out and many other meetings and programs contribute to the difficulties; there are limited resources and "hassles" over release of staff; also reported were "turf issues" (debates over academic levels in articulation discussions), unresponsiveness of local school boards, lack of involvement by secondary school districts, and occasional unresponsiveness of the Department of Education.

Continuous Improvement

In which areas of activity during the implementation of Tech Prep curriculum and instruction did you experience the greatest improvement? Why?

The greatest improvements were noted in departmental acceptance of Tech Prep, the number of students enrolling in articulated courses (especially applied academics), increased student interest in education, and increased networks with post-secondary and other consortia members.

Describe the areas that were the most difficult to improve in the development of Tech Prep curriculum and instruction in your consortium and explain why you think they were?

The greatest difficulties were getting "middle" students enrolled in Tech Prep, overcoming the image of Tech Prep as "new general track", changing students' and parents' paradigms about the low value of a 2-year education, getting sufficient funding and resources to expand Tech Prep, and getting individual departments to "see the big picture".

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Marketing***
*System Activity - **Overall Planning***

Planning

Describe the mechanisms you planned for implementing the Tech Prep marketing goals from your consortium's original strategic plan (e.g., committees, planning groups)?

Describe the overall goals, activity plans, and timelines with which you charged personnel assigned to develop Tech Prep marketing during the project.

The marketing committees worked with the steering committees' initial goals and added their own goals. Workshops, conference participation, planning meetings, and orientation sessions describing the purpose of Tech Prep were important parts of the planning process. Promotional materials were developed using different media, e.g., videos, brochures, posters, news releases, radio announcements, weekly TV programs, and speakers. Including information about Tech Prep in registration booklets was an effective marketing tool. Most consortia felt that marketing was an ongoing process and everyone's responsibility.

Implementation

Describe how the goals, activity plans, and timelines for marketing Tech Prep were coordinated among the institutions within your consortium?

Consortium-wide and school specific activities were held to market Tech Prep. Coordination with stakeholders was an important aspect of marketing, with monthly committee meetings serving as the major means of coordination. Most activities were coordinated through the Tech Prep coordinator and marketing committee members.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the mechanisms, goals, activity plans and timelines set for the Tech Prep marketing were reasonable; what data did you collect?

How are you using this information to develop new or revised overall goals and strategies for implementing the consortium's Tech Prep marketing?

Articulation agreements, staff surveys through MN 2000, industry surveys, college advisory committees, Planning, Evaluation, and Reporting committees (PER), volunteer surveys, consultant surveys and informal feedback were among the techniques used to gather data. Data suggested that marketing needs to be a constant emphasis in order to achieve complete implementation of Tech Prep. Marketing should be built around the success of Tech Prep students. Consortia used the information gathered through formal and informal feedback to rewrite brochures and revise marketing strategies.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Marketing***
*System Activity - **Staff Development***

Planning

Describe the process your consortium used to determine staff development and training needs for marketing Tech Prep in your consortium's schools.

Describe the staff development activities your consortium planned to deliver staff development for marketing Tech Prep programs.

Most consortia used some form of needs assessment as part of the planning phase. Plans for Tech Prep were based on student and parent demands and staff interests. Techniques for gathering data included: personal interviews, staff surveys, focus groups, or some combination of techniques. Typically the primary planning goal was to familiarize people, staff, and community with Tech Prep terms and philosophy. Opportunities to attend local, state, and national conferences and inservices were important to staff development. One consortium emphasized counselors as an important link in marketing. Another emphasized the need to communicate with all stakeholders at the onset to "promote ownership in the process".

Implementation (What was actually done?)

Describe the staff development and training activities your consortium has conducted to address the Tech Prep marketing strategies.

All but one consortium identified attending conferences as a primary staff development activity. Another area of staff development was training and in-services held by State Tech Prep people or local Tech Prep coordinators. Visiting other Tech Prep sites was also listed as an important staff development strategy. One consortium tied marketing activities closely to staff development. Meetings between consortium members and faculty were termed "informal marketing".

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the staff development activities your consortium provided were successful in developing expertise needed to address your marketing needs? What data did you collect?

How are you using this information to develop new or revised staff development activities to improve the marketing of Tech Prep programs?

Data were gathered through follow-ups (one consortium used a written evaluation at a large-scale event), questionnaires, or simply meeting together to informally share responses. Information was shared at team meetings as a vehicle for self-improvement. Feedback was also used to adjust future marketing plans. One consortium held a weekly interactive cable Tech Prep informational program, and also sponsored "Showcase '94" highlighting best practices within the group. Information used at registration nights was indicated as an area of success in marketing Tech Prep. One consortium found it helpful to hire a marketing consultant.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Marketing***
*System Activity - **Special Populations***

Planning

Describe the process your consortium used to develop a Tech Prep marketing plan specifically for the inclusion of students with special needs.

Describe the marketing activities your consortium planned to market Tech Prep programs to students from special populations and their parents.

All consortia made efforts to include all students in Tech Prep programs and activities. Some consortia placed particular emphasis on the development of inclusive marketing materials. Nearly all consortia involved support services staff in this effort. Most consortia did not do anything different with their marketing campaign for special populations, but simply tried to be "inclusive". One consortium developed special programming for incarcerated students. Another consortium provided brochures and videos to case managers for review with parents at IEP meetings. Information and training for administrators, counselors, and staff were provided to assist with recruiting and retaining special population students.

Implementation (What was actually done?)

Describe the activities your consortium undertook to specifically attract students from special populations to the Tech Prep programs in your consortium's schools.

Marketing activities were held at the time of registration, and information about Tech Prep was included as part of the materials, but typically nothing special was done to market to special populations. Two consortia emphasized job availability in marketing Tech Prep to special population students and parents. Meetings were held with special population groups to inform them of the importance of Tech Prep. One consortium worked with an equity coordinator and designed a program to recruit women to non-traditional programs.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the marketing activities your consortium conducted actually attracted students from special populations to your Tech Prep programs? What data did you collect?

How are you using this information to develop new or revised marketing activities to attract students from special populations to your Tech Prep programs?

In nearly all cases numbers of enrolled special population students were used to evaluate success. Consortia continue to emphasize the desire to be inclusive with marketing. One consortium asked students actively completing the program to discuss the benefits of Tech Prep with other students.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Marketing***
*System Activity - **Curriculum Integration***

Planning

Describe the process your consortium used to plan the marketing of curriculum integration in the schools of your consortium.

Describe the activities your consortium planned to promote curriculum integration in the Tech Prep programs.

Active committee participation and regular meetings were critical elements of planning for curriculum integration. All consortia stressed the importance of curriculum integration and encouraged staff to participate in conventions, workshops, and inservices to learn about integrating Tech Prep into their curriculum. Three out of the seven consortia specifically addressed cross-disciplinary faculty involvement as a method for curriculum integration planning. Another method for implementing curriculum integration cited by consortia was the involvement of business and industry stakeholders.

Implementation (What was actually done?)

Describe how your consortium marketed curriculum integration to all groups both in and out of the schools in your consortium.

Faculty attended orientation programs and were encouraged to talk with others in the consortium. Workshops and inservices were held for staff. Groups of interdisciplinary faculty were brought together to discuss integration. Materials distributed to the public also stressed integration as an important component of Tech Prep. One consortium put together a newsletter to market Tech Prep. Most consortia agreed that word-of-mouth advertising was an effective way to market curriculum integration among teachers. One example of effective curriculum integration was a student project that involved three different teachers. A Tech Prep handbook specifically designed to provide principals and counselors with information on articulation and curriculum integration was a helpful tool in another consortium.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the marketing activities your consortium conducted to promote curriculum integration in your Tech Prep programs were successful? What data did you collect?

How are you using this information to develop new or revised marketing activities to improve curriculum integration in your Tech Prep programs?

Consortium team members reviewed activities and sought suggestions. Some suggestions included greater use of video, outside speakers, and increased radio and print materials. Growth in interest in Tech Prep and in enrollment were identified as signs of improvement. Most consortia agreed that staff development is a critical marketing tool for curriculum integration. There is a need to identify the roles of secondary and junior high school educators in curriculum integration. One consortium that is just beginning integration decided the first focus was to market it to its staff, and later to the public and to students. Consortia typically assessed improvements in marketing curriculum integration by looking at the number of credits or courses that have been articulated.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Marketing***
*System Activity - **Articulation***

Planning

Describe the process your consortium used to plan for promoting the articulation of secondary and post-secondary Tech Prep programs.

Describe the activities your consortium planned to market articulation within its Tech Prep programs.

Meetings of the marketing committees and meetings of leadership at the post-secondary and secondary levels were held. Local media covered the signing of articulation agreements. Information about articulation was incorporated into catalogs and registration materials. Articulated classes received a special designator. One consortium used a model from a pilot site. Another consortium adopted materials from a successful out-of-state Tech Prep program.

Implementation (What was actually done?)

Describe how your consortium marketed articulation of secondary and post-secondary Tech Prep programs to all groups both in and out of the schools in your consortium.

Information about articulation was incorporated into registration materials. Brochures were developed to inform students and parents about Tech Prep. Promotional events, such as Career Days, were used to market articulation. One consortium used a newsletter to report success in articulation and provide information to students, staff, and faculty.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the marketing activities your consortium conducted to improve the articulation of your Tech Prep programs were successful? What data did you collect?

How are you using this information to develop new or revised marketing activities to improve articulation within your Tech Prep programs?

The most popular method for determining the effectiveness of marketing materials was tracking the numbers of students with advanced standing or college credit. Feedback from staff was also gathered. Success stories were judged to be a good way to promote Tech Prep. One consortium issued Certificates of Advance Standing, then compared the numbers of certificates after each semester to determine the success of marketing. One consortium received feedback to increase the number of mailings to parents and students and to promote Tech Prep by using stories of successful Tech Prep students.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Marketing***
*System Activity - **Partnerships***

Planning

Describe the process your consortium developed to ensure that all stakeholders were included in the decision-making process for the Tech Prep marketing plan.

Describe the activities your consortium planned to use to assure the participation of stakeholder groups in the planning and implementation of the marketing of Tech Prep programs.

In all consortia the members of the initial steering committee and planning group was comprised of key stakeholders from schools, business and industry, and, in some cases, the community. One consortium involved the Student Leadership Board and parents in curriculum review. Another consortium used committees within particular disciplines to develop marketing plans promoting their specific areas.

Implementation (What was actually done?)

Describe the involvement that stakeholder groups had in the marketing of Tech Prep programs in your area.

Information was presented to all stakeholders through meetings, workshops, and other activities. In most consortia, the Tech Prep Coordinator met with business and community service groups to explain Tech Prep. A critical form of marketing was word-of-mouth advertising from student to student. Involving business and industry through job shadowing, mentorships, and grants to partner students with business and provide "real world" experience were effective ways of involving stakeholders. Holding meetings at different times and locations allowing business leaders to attend increased their involvement and commitment to Tech Prep.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the participation of stakeholder groups in the marketing of Tech Prep programs was successful? What data did you collect?

How are you using this information to improve the future participation of stakeholders in marketing Tech Prep programs in your consortium?

Positive feedback collected through surveys and customer satisfaction reports provided data for improvement. In most cases no hard data were obtained, feedback was gathered informally through phone calls, and passing comments. Continuous improvement was assessed by the increase in the numbers of students and staff involved in programs over time, and through repeat enrollment in programs. One consortium emphasized the need for one-on-one communication with stakeholders. Documented promotion of awareness efforts and hands-on involvement by students, for example in creating a video promoting Tech Prep, were also cited as ways to increase involvement.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Marketing***
*System Activity - **Evaluation***

Planning

Describe how the strategies to evaluate the success of your consortium's marketing plans for Tech Prep were developed.

Describe the evaluation strategies your consortium planned to use to determine the success of its Tech Prep marketing activities.

Three key areas were identified for evaluation: program awareness, enrollment, and understanding of Tech Prep concepts. A questionnaire developed for stakeholders in the consortium was one technique to evaluate satisfaction with Tech Prep.

Implementation (What was actually done?)

Describe the evaluation activities that were conducted by the consortium to determine the success of your Tech Prep marketing program.

The most popular form of evaluation was to report the numbers of activities within the consortium and identify the number of participants. An ongoing study of increased Tech Prep awareness and questionnaires assessing the level of understanding of Tech Prep programs were two forms of evaluation used by consortia. Most consortia are still in the planning stages and have not completed any formal evaluation of marketing at the time this self-assessment was completed.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the evaluation activities used to evaluate your marketing of Tech Prep programs were successful? What data did you collect?

How are you using this information to improve the future evaluation of your marketing program for your consortium?

Tech Prep success stories need to be promoted through a variety of media. Increases in the number of students involved in the program is one way to demonstrate improvement. Consortia agree that it is helpful to learn from the past and improve weaknesses in evaluation strategies for the future.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

Retrospective - Marketing

Planning

What planning processes worked best for your consortium while it was designing the marketing plan for Tech Prep programs?

Initial work of steering committees was helpful in designing the marketing plans. Hiring a marketing consultant was effective in one consortium. Site visits were helpful to a number of consortia, they provided an opportunity to assess the status of their marketing efforts in relation to another consortium. Convention workshops were helpful in developing marketing strategies and designing effective materials.

Based on your experience, what pitfalls would you caution a new consortium about when planning to market Tech Prep programs?

Consortia reported the importance of a broad, inclusive marketing campaign targeted towards a wide population. The "Tech Prep Concept" often needed to be explained, it was frequently misunderstood by the public. Consortia recommended to keep the consortium size small, the pace of implementation manageable, and not to pursue too many agendas at once. One consortium indicated that it was difficult to plan marketing when key players question if Tech Prep should even be marketed. Tech Prep curricula should be in place or close to completion before beginning to market. One consortium was experiencing closing of a vocational school at the time they were trying to market. Another consortium reported problems with the level of commitment by vocational instructors. The "new" mission for vocational education must be understood by everybody.

MRDC, University of Minnesota © 1994

Implementation

When implementing your Tech Prep marketing plan, in which areas of activity did you experience the greatest successes? Explain why you think these occurred.

Career Awareness Days were successful in marketing Tech Prep. Holding meetings to explain clusters to students and parents were very effective. Printed materials outlining career paths for distribution to parents and students were helpful in understanding the goals of Tech Prep. Consortia experienced the most success in articulation when there was a commitment between secondary and post-secondary institutions to cooperate. Success stories from students and teachers were an effective marketing tool.

Please describe the three of four greatest difficulties you have encountered in marketing your Tech Prep programs? Please explain why you think these occurred.

Funding was limited and consortia reported the need to prioritize their efforts. School board apathy, the view of Tech Prep as a "frill", was a difficult issue in some consortia. Philosophical differences between stakeholders ("wait and see" attitude, "Tech Prep as a fad", etc.) made marketing difficult. The lack of time to develop coordinated marketing plans hindered effectiveness, and resulted in delays (for example, the inability to roll out the marketing campaign with registration). Counselors, who play an important role in marketing, were not always supportive of Tech Prep. Misunderstanding of the Tech Prep concept was a large factor influencing the effectiveness of marketing; many consortia reported the need for extensive education efforts directed towards the public and staff.

Continuous Improvement

Which areas of activity during the implementation of your Tech Prep marketing program were most easily improved? Why?

Articulation processes were easy to implement because there was peer pressure to have equity between educational systems. Another area that was easily improved was access to conferences. Conference attendance has been shown to enhance interest and increase active participation by stakeholders. Success builds on itself, a successful program, therefore, will continue to be successful. Providing positive data on applied programs helped consortia market Tech Prep. Revisions of marketing materials were easily made based on feedback.

MRDC, University of Minnesota © 1994

Please describe the areas you found most difficult to improve in the marketing of Tech Prep in your consortium and explain why you think this was so?

Some stakeholders were reluctant to participate in marketing activities because they were not convinced of the Tech Prep concept. One consortium reported that its large size and the pursuit of too many different agendas made improvement difficult. Teacher and parents oftentimes seemed satisfied with the status quo, and advocated college prep for everyone. Another difficulty arose because teachers themselves are a product of the college prep system and may subconsciously promote that system and "forget" about other options, such as Tech Prep. Some consortia also experienced difficulty with vocational teachers who found it hard to accept that vocational classes are more than career exploration and preparation for work right out of high school.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Student Assessment & Evaluation***
*System Activity - **Overall Planning***

Planning

Describe the mechanisms you planned for implementing Tech Prep student assessment and evaluation goals from your consortium's original strategic plan (e.g., committees, planning groups)?

Describe the overall goals, activity plans, and timelines with which you charged personnel assigned to develop Tech Prep student assessment and evaluation during the project.

Planning for implementation of student assessment and evaluation was done jointly by consortium leadership and committees consisting of secondary and post-secondary staff. The goals for this area were to develop methods to systematically assess the skill and competency levels of Tech Prep students at the secondary and post-secondary levels, and to demonstrate achievement of work place relevant skills. Associated goals were to assess student preparedness for post-secondary education and training, and implementation of advanced standing credit. In addition, achievement levels of Tech Prep students versus non-Tech Prep students at the high school level and beyond were to be assessed.

Implementation

Describe how the goals, activity plans, and timelines for student assessment and evaluation Tech Prep were coordinated among the institutions within your consortium?

Activities were coordinated through frequent meetings between secondary and post-secondary levels; common procedures for advanced standing credit were developed; and common assessment tools for certain subjects were implemented. One consortium developed a testing program to be used for entrance and career assessment at the post-secondary level. Another

MRDC, University of Minnesota © 1994

consortium used ADVANCE for coordinating student assessment and evaluation.

Continuous Improvement

How were you able to determine if the mechanisms, goals, activity plans and timelines set for Tech Prep student assessment and evaluation were reasonable; what data did you collect?

How are you using this information to develop new or revised overall goals and strategies for implementing the consortium's Tech Prep student assessment and evaluation?

Many consortia stressed the importance of assessment and evaluation in shaping their programs. Initial data show support for Tech Prep among students and staff, and there is high interest in program development and workshops on articulation and integration. As enrollment increases and Tech Prep expands, the need for better assessment tools also increases. Areas for improved monitoring and evaluation include enrollment trends and student achievement, student satisfaction, and student attitude and career awareness. In addition, the MN Graduation Rule is seen as providing direction in this area.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Student Assessment & Evaluation***
*System Activity - **Staff Development***

Planning

Describe the process your consortium used to plan for the staff development required to conduct Tech Prep student assessment and program evaluation.

Describe the staff development activities your consortium selected to prepare staff to conduct Tech Prep student assessment and program evaluation.

Planning for staff development required for assessment and evaluation consisted of identification of appropriate workshops, conferences, and training sessions; determination of student needs through discussions with counselors and administrators; and meetings between high school and technical and community college staff.

Implementation (What was actually done?)

Describe the activities your consortium conducted to train staff in Tech Prep student assessment and program evaluation.

Consortium leadership and volunteer district staff attended workshops, national and regional conferences, and other events on assessment and evaluation, notably AVA, CORD, and Southern Regional Education Board (SREB). Some consortia arranged for visits to other Tech Prep sites, coordinated meetings between secondary and post-secondary levels, and provided general inservice training. Special consideration was given to the MN Graduation Rule and PER processes. One consortium developed a comprehensive evaluation plan that is awaiting funding, but was piloted in two districts.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the staff development activities you conducted were appropriate to Tech Prep student assessment and program evaluation needs? What data did you collect?

How are you using this information to improve future staff development activities for student assessment and program evaluation in your Tech Prep consortium?

Data collected were primarily informal, such as staff response to inservices. Much remains to be done in this area; specifically needed is inservice training for counselors and guidance personnel at secondary and post-secondary institutions to better understand the role of assessment and evaluation for career planning. School level assessments need to be coordinated among districts and consortia. ADVANCE tools are useful in design and tracking of student assessments. The MN Graduation Rule is also helpful in this area.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Student Assessment & Evaluation***
*System Activity - **Special Populations***

Planning

Describe the process your consortium used to plan Tech Prep student assessment and program evaluation strategies for students from special populations.

Describe the strategies your consortium selected for Tech Prep student assessment and program evaluation for special populations.

Planning was accomplished through close collaboration with support services staff and coordination with other Perkins activities. One consortium's goal was to bring MN into the SREB evaluation system, and to set up model evaluation plans. Specific activities are scheduled at different grade levels (8th grade evaluation, 10th grade aptitude testing and IEP's, tracking by special education teacher, referral, job coach, and special education advocate).

Implementation (What was actually done?)

Describe how the performance of Tech Prep students from special populations was assessed in your consortium.

Describe how the success of Tech Prep programs in serving students from special populations was evaluated.

Various methods were used in assessing performance of Tech Prep students from special populations: Team teaching with LD teachers and EBD education assistants; improved data reporting/analysis for course completion and credit status; basic assessment of academic classes, weekly monitoring of progress of special population students; use of IEPs; and support services on an as-needed basis.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the Tech Prep student assessment and program evaluation strategies were successful? What data did you collect?

How are you using the information you collected to develop new or revised student assessment and program evaluation strategies?

Data were collected on: program satisfaction (especially in applied academics where there are many special population students), course completion rates, and continuation through the program. The information was used to revise and modify existing assessment and evaluation strategies, investigate possible use of supplemental materials, and redesign of programs. The MN Graduation Rule provided guidelines.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Student Assessment & Evaluation***
*System Activity - **Curriculum Integration***

Planning

Describe how your consortium developed a plan to conduct student assessment and program evaluation within an integrated curriculum.

Describe the unique characteristics of your student assessment and program evaluation plans that resulted from the consideration of curriculum integration in Tech Prep programs.

Planning for assessment and evaluation was usually accomplished jointly by a panel of districts, post-secondary institutions, and business, industry and labor. Some consortia used information from CORD and SREB. One consortium proposed a plan for a standardized assessment instrument to demonstrate equal or better student learning with the applied academics approach versus basis skills development.

Implementation (What was actually done?)

What unique student assessment and program evaluation techniques were adopted to accommodate an integrated curriculum in your consortium?

One consortium had collected baseline data in 1992 and proposed a longitudinal study. Another selected 30 students to participate in the SREB assessment. Another recommended the use of ADVANCE electronic portfolios to record student performance. Some consortia conducted comparative studies on program and student outcomes, monitored effects of curriculum integration, and used this information for further planning and assessment.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the student assessment and program evaluation activities you developed in light of curriculum integration were appropriate? What data did you collect?

How are you using this information to improve your student assessment and program evaluation systems in relation to curriculum integration?

Student assessment and evaluation information are used to modify and revise all phases of Tech Prep programs.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Student Assessment & Evaluation***
*System Activity - **Articulation***

Planning

Describe how your consortium developed a plan to conduct student assessment and program evaluation within an articulated curriculum between secondary and post-secondary education.

Describe the unique characteristics of your student assessment and program evaluation plans that resulted from the consideration of articulated programs.

Planning was accomplished through collaboration between consortium leadership, school districts, and post-secondary institutions; successful consortia were used as benchmarks, and models of successful articulation evaluation developed.

Implementation (What was actually done?)

What unique student assessment and program evaluation techniques were adopted to accommodate an articulated curriculum in your consortium?

Consortia formed cooperative relationships with post-secondary institutions and created models for successful articulation. In this process, they reviewed syllabi, developed assessment standards for student progress and general skills curricula. One consortium used the Minnesota Technical College Curriculum Model, another adopted the ADVANCE curriculum series, a third is using the electronic ADVANCE general studies portfolio in articulating courses with the technical college.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the student assessment and program evaluation activities you implemented in light of an articulated curriculum were appropriate? What data did you collect?

How are you using this information to improve your student assessment and program evaluation systems in relation to curriculum articulation?

Consortia track students through the entire Tech Prep program and monitor progress throughout secondary schools and into post-secondary institutions. An ever-increasing number of students are entering the technical college with advanced standing credits; curriculum integration information is contained in student registration handbooks. The issues considered at annual articulation reviews are course sequencing, more efficient placement of students, and increasing the awareness of Tech Prep among students. Using the MN Graduation Rule, teachers in all areas need to meet and share and review curricula.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Student Assessment & Evaluation***
*System Activity - **Partnerships***

Planning

Describe the process your consortium planned to ensure that all stakeholders were included in the design of Tech Prep student assessment and program evaluation.

Describe the activities your consortium planned to use to ensure the participation of stakeholder groups in the planning and implementation of the student assessment and program evaluation systems in your Tech Prep programs.

All consortia included a variety of stakeholders in planning assessment and evaluation. These included post-secondary institutions, business and industry, and the greater community. One consortium conducted a formal survey of all businesses in the consortium area to ensure relevance to work-world issues. Another consortium used the MN 2000 process conducted by community volunteers.

Implementation (What was actually done?)

Describe how members of stakeholder groups were actually included in the design and implementation of the assessment of Tech Prep students and Tech Prep program evaluation.

Consortia ensured inclusion of various stakeholders through a number of meetings and attendance at workshops, such as CORD's applied curriculum and authentic assessment workshops. Guidelines and standards for assessment and evaluation were set and validated by business and industry. In one instance, the ADVANCE electronic portfolio was used to assess student proficiency.

MRDC, University of Minnesota © 1994

Continuous Improvement

How did you determine if the inclusion of stakeholders in the design and implementation of student assessment and program evaluation was appropriate and successful? What data did you collect?

How are you using this information to improve the contribution of members of stakeholder groups in the assessment of Tech Prep students and the evaluation of Tech Prep programs?

The participative process of including a broad range of stakeholders will continue as the evaluation and assessment processes are piloted and refined. Results will be used to revise the consortia annual plans. Success is determined by continued support of Tech Prep by students, parents, employers, and the community at large. Business involvement is sought to evaluate skills of Tech Prep graduates and to modify the program as needed.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

Tech Prep System - ***Student Assessment & Evaluation***
System Activity - ***Evaluation***

Planning

Describe the process your consortium used to plan for the evaluation of the Tech Prep student assessment and program evaluation strategies.

Describe the evaluation strategies your consortium selected to appraise its Tech Prep student assessment and program evaluation systems.

Evaluation was planned by committees established by consortium leadership, members were trained and apprised of expectations, and provided feedback on overall progress of Tech Prep. This process included members of post-secondary institutions and business representatives. Some consortia indicated their reliance on a state-wide or federal plan for evaluation. One consortium used PER strategies.

Implementation (What was actually done?)

Describe the activities your consortium actually conducted to appraise its Tech Prep student assessment and program evaluation activities.

Most consortia conducted some informal evaluations, one is in the process of conducting a pre/post test on an applied academics course. All completed the state-wide self-evaluation.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the procedures used to evaluate your Tech Prep student assessment and program evaluation activities were successful? What data did you collect?

How are you using this information to improve the future evaluation of the student assessment and program evaluation activities for your consortium?

Results of the evaluations were used to modify or revise existing Tech Prep activities and were incorporated into the annual plans. Data show initial success of Tech Prep and serve as a baseline to evaluate future activities. One consortium awaits funding of a comprehensive evaluation plan. Continuous monitoring is in place. PER processes and MN 2000 data provide additional feedback.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Retrospective - **Student Assessment & Evaluation***

Planning

What planning processes worked best for your consortium in designing Tech Prep student assessment and program evaluation systems?

Broad-based involvement of stakeholders, including students, created commitment and synergy for Tech Prep. Involving instructors yielded valuable first-hand information. Assessment components should be developed early on in the Tech Prep process. Discussions on assessment methods and processes led to recognition of local needs and requirements. Strong leadership by the consortium was invaluable in this process.

Based on your experience, what pitfalls would you caution a new consortium about when planning Tech Prep student assessment and program evaluation?

Coalition-building took time and energy; determining assessment criteria after the program was implemented proved counter-productive, it needs to be done up-front. Integration of MN Graduation Rule and Tech Prep was difficult.

Implementation

When implementing Tech Prep student assessment and evaluation, in what areas of activity did you experience the greatest success? Why?

Assessment and evaluation worked best when the consortium could make use of existing processes. Decisions that did not require broad-based support were easy. Planning assessment and evaluation before working out instructional practices ensured thinking of Tech Prep as different from traditional Vo Tech programs. Support by career centers, counselors, and parents was crucial to success. Increased enrollments and successful courses were the best advertising for Tech Prep. Good models and benchmarking were helpful in implementing assessment and evaluation.

MRDC, University of Minnesota © 1994

What Tech Prep student assessment and program evaluation activities would revise if you had it to do over again?

The entire process was too top-down, and there was a lack of bottom-up involvement and support. There was a lack of time for teachers to review each area and plan together, and a lack of communication across all systems.

Continuous Improvement

Which areas of activity during the design and implementation of Tech Prep student assessment and program evaluation systems were the easiest to improve? Please explain why you think they were?

The easiest areas to improve were those over which Tech Prep stakeholders had the most control, the further the need for involvement was removed from Tech Prep, the greater the resistance. Low or no-cost activities were easy to implement. Articulation agreements were enhanced by staff participation.

Describe the areas you found most difficult to improve in Tech Prep student assessment and program evaluation. Please explain why you think they were.

It was difficult to gain and maintain involvement of all stakeholders, results of efforts often seemed too remote from activities on hand. Contract language was sometimes difficult to translate into practice. Many consortia are still looking for reliable and valid assessment tools that provide accurate and usable information. Gathering baseline data on Tech Prep was not an integral part of the original contract or grant for any consortium. There was little time to improve once a system was in place. The most difficult task was to change existing paradigms: the changed assessment model could depart from paper and pencil tests, rote memorization, textbook curricula, and "credential factories".

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Support Services & Counseling***
*System Activity - **Overall Planning***

Planning

Describe the mechanisms you planned for implementing Tech Prep support services and counseling service goals from your consortium's original strategic plan (e.g., committees, planning groups)?

Describe the overall goals, activity plans, and timelines with which you charged personnel assigned to develop Tech Prep support services and counseling services during the project.

Planning for support services and counseling was accomplished through staff development and training for support services and counseling staff. The goal was to identify priority groups and target populations and plan appropriate strategies. Counselors were included in all activities. One consortium formed a support services planning committee to facilitate career and academic planning. All staff received inservice training on the Tech Prep philosophy. Counselors and support services were included in the original planning committee. Goals included updating registration procedures, developing a database for tracking and monitoring Tech Prep students, developing career clusters, and identifying the key roles for student services and counselors.

Implementation

Describe how the goals, activity plans, and timelines for the Tech Prep support services and counseling services were coordinated among the institutions within your consortium?

Frequent meetings were held between secondary and post-secondary representatives. Coordination was accomplished through extensive inservices for all counselors on the Tech Prep philosophy, registration procedures, and counseling students to make choices. In one case, a

MRDC, University of Minnesota © 1994

principal/counselor handbook provided consistent direction throughout the consortium. In another instance, the Tech Prep coordinator oversaw activities and reported back to the steering committee to keep on track, encouraging site-based management.

Continuous Improvement

How were you able to determine if the mechanisms, goals, activity plans and timelines set for Tech Prep support services and counseling services were reasonable; what data did you collect?

How are you using this information to develop new or revised overall goals and strategies for implementing the consortium's Tech Prep support services and counseling services?

Limited data had been collected by the consortia. Monitoring registration and informal student interviews provided some initial information. One consortium reported that counselor involvement was regarded as instrumental in facilitating registration in Tech Prep. Career counseling workshops were suggested as a means to ensure that the needs of special populations were met. Information was forwarded to counselors to encourage them to assist more students to make Tech Prep choices. Information was used to develop all-around plans for student support. One consortium indicated that partnerships with business and industry must be strengthened to develop more effective counseling models and to revise career clusters periodically.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Support Services & Counseling***
*System Activity - **Staff Development***

Planning

Describe the process your consortium used to plan staff development activities in the area of support services and counseling for Tech Prep students.

Describe what activities were selected to prepare staff to conduct Tech Prep-related support services and counseling.

In some consortia, counselors were active members of the initial planning committees. In others, counselors attended inservices on Tech Prep or were presented information in other ways. Counselors also attended conventions and participated in other activities. Some consortia conducted visits to other successful Tech Prep sites.

Implementation (What was actually done?)

Please describe the staff development activities your consortium actually conducted to insure appropriate Tech Prep support services and counseling.

Specific programs were held for support staff and counselors; in some instances, outside speakers were brought in. In one consortium, counselors were very involved and provided leadership to neighboring consortia. Materials for explaining Tech Prep were developed and distributed, and in-depth information provided to a wide segment of staff and counselors.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the Tech Prep support services and counseling staff development activities were successful? What data did you collect?

How are you using this information to develop or revise staff development activities for implementing Tech Prep support services and counseling?

Consortia reported the need for more training and integration between support services and counseling staff and teachers. Data collected included the number enrolled in specific Tech Prep sequences, as well as the number of career portfolios developed. Little hard data are available, and in some cases the only feedback consists of informal comments. In most consortia, staff development for support services and counseling continues to evolve along with the growth of Tech Prep.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Support Services & Counseling***
*System Activity - **Special Populations***

Planning

Describe the process which your consortium used to plan for support and counseling services specifically for special populations in Tech Prep.

Describe the strategies your consortium selected to address the support services and counseling needs of Tech Prep students from special populations.

Most consortia had decided not to target special population specifically, but rather focused on making Tech Prep inclusive for all students. They involved case managers and student advocates in planning and implementation. Tech Prep is regarded as a program for all students, although some emphasis was placed on encouraging more gender equity in non-traditional vocations.

Implementation (What was actually done?)

Describe the activities you conducted to ensure that the support and counseling services addressed the needs of special populations in your Tech Prep programs?

In one consortium, staff attended conferences on gender equity. Focus was placed on integration and participation by case managers. Another consortium decided to steer special population students to appropriate applied classes that fit their IEPs. In general, consortia stressed the involvement of special education staff in the development of curriculum and integration. In one instance, counselors developed a resource center to help special needs students outside of class.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the selected strategies successfully addressed the support service and counseling needs o Tech Prep students from special populations? What data did you coliect?

How are you using this information to improve the delivery of support services and counseling to Tech Prep students from special populations?

Most consortia determined success of Tech Prep by the number of students involved. Many consortia reported that they had not had the program in place long enough to collect sufficient data. In one instance, a consortium used feedback to implement a course in visual arts open to everyone, but especially designed for special populations. It was observed that there must be a balance between numbers of special needs students and 'regular' students in order for integration to be successful. Consortia also reported concern with ensuring equity in programs.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Support Services & Counseling***
*System Activity - **Curriculum Integration***

Planning

Describe how your consortium developed a plan to provide support services and counseling within an integrated curriculum.

Describe the unique characteristics of the support services and counseling services selected that resulted from the consideration of curriculum integration in Tech Prep programs.

In many consortia, counselors worked with business and industry representatives and teachers to help plan curricula that span high school and two-year post-secondary. Counselors and support services staff were involved in departmental meetings on curriculum integration. Career planning was encouraged for integrated curriculum planning. Portfolios were developed.

Implementation (What was actually done?)

What unique student support and counseling services were adopted to accommodate an integrated curriculum in your consortium?

Counselors met with students to put together career goals based on clusters. Counselors assisted parents and students to put together individual career plans. One consortium focused on integrating special populations. Another consortium used the Minnesota Technical College Curriculum Model system to facilitate integration.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the support and counseling services you implemented in light of curriculum integration were appropriate? What data did you collect?

How are you using this information to improve Tech Prep-related support services and counseling in the schools in your consortium?

Most consortia measured improvement by the numbers of students in sequenced courses. Most consortia did not gather enough data to evaluate this area thoroughly. Informal information indicates that consortia are moving in the right direction and are preparing students for work.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Support Services & Counseling***
*System Activity - **Articulation***

Planning

Describe how your consortium developed a plan to deliver support and counseling services within an articulated curriculum between secondary and post-secondary education.

Describe the unique characteristics of your support and counseling service plans that resulted from the consideration of articulated programs.

In most consortia, support services and counseling staff were involved in planning articulation. One consortium had counselors involved with original articulation agreements as panel members. Another consortium developed a Career Planning booklet.

Implementation (What was actually done?)

What unique support and counseling service techniques were adopted to accommodate an articulated curriculum in your consortium?

Counselors typically worked with students to explain articulation agreements. Some consortia developed individual career folders/portfolios, others reported that counselors had been involved in curriculum writing for ADVANCE. In many consortia, counselors provided information and assistance for advanced credit agreements.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if support and counseling services you implemented in light of an articulated curriculum were appropriate? What data did you collect?

How are you using this information to improve your support and counseling systems in relation to curriculum articulation?

Through efforts of support services and counseling personnel, articulation agreements were developed that allow students to advance to the baccalaureate level. Some consortia used follow-ups and personal interviews with graduates to gather information. All consortia used the numbers of advanced standing students and the number of career plans to assess success of Tech Prep.

One consortium reported work on a project to automate tracking of career paths and using this information to determine adjustments to the curriculum. Reports will be sent out to all stakeholders. The consortium expects that, as more articulation agreements are developed, there will be a maximum number of credits chosen that will transfer in to the technical college. In this case, counselors need to be informed how articulation works and what information needs to be contained in the new transcripts. This in turn requires course articulation standardization and understanding of assessment tools used by the post-secondary institution.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Support Services & Counseling***
*System Activity - **Partnerships***

Planning

Describe the process your consortium used to develop a plan for ensuring that all stakeholders were included in the design of Tech Prep support and counseling services.

Describe the activities your consortium selected to guarantee the participation of stakeholder groups in the planning and implementation of support and counseling services in your Tech Prep programs.

Most consortia reported that a wide range of stakeholders provided review and comments, and were generally involved in this area. In one instance, a Guidance Advisory Committee provided input, in another, different stakeholders participated on an implementation team.

Implementation (What was actually done?)

Describe how members of stakeholder groups were actually included in the design and implementation of support and counseling services.

One consortium reported that a technical college had ongoing involvement which improved communication and created a better-prepared student. Case managers and advisory committee members were an integral part in this process. Informational letters and personal visits by Tech Prep coordinators were used to keep stakeholders updated. Parents were often part of the initial team, or were invited to events and presentations. Volunteer programs with business and school partnerships were also initiated. Some consortia involved business and higher education partners in helping counselors. Other consortia arranged for field trip opportunities. One consortium reported that businesses were asked to develop a process for matching job requirements with skills taught in applied courses.

MRDC, University of Minnesota © 1994

Continuous Improvement

How did you determine if the inclusion of stakeholders in the design and implementation of support and counseling services was appropriate and successful? What data did you collect?

How are you using this information to improve the contribution of members of stakeholder groups in the support and counseling service activities?

Many consortia used surveys or informal feedback to assess the effectiveness of partnerships. Consortia reported the need for increasing the effort to involve local business and industry. Continuous involvement of all staff in all aspects of Tech Prep was regarded as important. One consortium decided to select a counselor to become part of the steering committee. Most consortia reported that on-going communication and feedback would determine what additional services may be needed or what present services need to be strengthened.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

*Tech Prep System - **Support Services & Counseling***
*System Activity - **Evaluation***

Planning

Describe the process by which the evaluation of Tech Prep-related support services and counseling was planned.

Describe the strategies your consortium selected to evaluate its Tech Prep-related support services and counseling.

Most consortia reported evaluating the program by measuring any increases in Tech Prep enrollment in general, and in underrepresented populations in particular (e.g., gender in non-traditional programs). Many consortia administered questionnaires to seniors, conducted follow-ups with recent graduates, non-graduates, and drop-outs. Some sent formal questionnaires to parents, students, faculty, and administration to determine areas in need of improvement. One consortium used an assessment tool designed to determine student, teacher, and parental awareness of workplace skills and knowledge requirements.

Implementation (What was actually done?)

Describe the strategies your consortium implemented to evaluate the effectiveness of its Tech Prep-related support services and counseling.

Three of the seven consortia had not implemented any formal evaluation processes yet. The others conducted formal and informal follow-ups with seniors and parents, administered student evaluations, and collected comments to gain information. Other consortia reviewed courses offered, student enrollment, and articulation agreements in place; some conducted further evaluations with regard to special populations. One consortium monitored the number of Tech Prep students enrolled in advanced standing classes from year to year.

MRDC, University of Minnesota © 1994

Continuous Improvement

How were you able to determine if the Tech Prep-related support services and counseling evaluation strategies you selected were appropriate? What data did you collect?

How are you using this information to improve the future evaluation of Tech Pre-related support services and counseling?

Most consortia recommended periodic formal review meetings to determine the appropriateness of Tech Prep programs. Enrollment will continue to be a starting point for evaluation, but other ways to evaluate effectiveness of counseling should also be developed. Goals are increases in special population participation and articulation. One consortium recommended that efforts be oriented towards sequenced course completion, not only course completion. In questionnaires and student reports, the needs of students should be identified and Support Services and Counseling should respond accordingly. Both the financial and human resources should be utilized more effectively.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System

Retrospective - Support Services and Counseling

Planning

What processes worked best for your consortium during the planning phase of designing and selecting Tech Prep-related support services and counseling strategies?

One consortium reported the use of teams to identify needs and set realistic goals as an effective strategy. Counselors should be involved in the initial phases and throughout the entire project. Information sessions, conferences and workshops validated Tech Prep concepts and clarified roles. Personnel strengthened the process by meeting with staff from different schools, curriculum disciplines, and levels. Counselors worked closely with curriculum teams so that accurate information was conveyed to students.

Based on your experiences, what pitfalls would you caution a new consortium about when planning Tech Prep-related support services and counseling?

One reported obstacle was the lack of support of Tech Prep by administrators and counselors. Goals should be sensitive to available resources and should be based on the needs of students, teachers, and the community. Consortia voiced concern over the possibility that "unmotivated" students will be the only ones in applied classes, which reinforces the stereotypical assumption of Tech Prep as a "lesser program".

Implementation

When implementing Tech Prep support services and counseling, in what areas of activity did you experience the greatest successes? Why?

Consortia reported that counselors and support services staff were convinced that Tech Prep plays an important role in education and career preparation. Information sessions with parents prior to registration reinforced this message. Some consortia stressed the importance of consistent leadership by the management team in understanding the role of support services and counseling.

MRDC, University of Minnesota © 1994

One consortium reported the development of a high school career plan for all K-12 students, including a portfolio for each student.

> Describe the three of four greatest difficulties you encountered in setting up support services and counseling for Tech Prep programs?

Consortia viewed the belief that the "only ticket to success is a baccalaureate degree", was one of the greatest obstacles encountered in setting up support services and counseling for Tech Prep. There is also a lack of understanding that education is a continuous process. Overcoming the mind set and attitudes of traditional counselors and administrators posed a further difficulty, and led to initial hesitancy and community misunderstanding of the value of all forms of higher education. Consortia reported only limited success in this area because of the perception that students "don't need Tech Prep programs". Counselors are reported to be already overburdened due to other changes and do not have time to be actively involved in Tech Prep. The lack of time and resources was cited as a major difficulty.

Continuous Improvement

> Which areas of activity during the design and implementation of Tech Prep support and counseling service systems were the easiest to improve? Please explain why you think they were?

Career and program clusters were reportedly easy to implement and improve, as was student assessment, because it was already in place in many districts and consortia. Where support material was provided to counselors, this was also viewed as positive, although teachers remain the key to providing support service to students. One consortium observed that as more and more students take the applied courses, opportunities to network counseling exist and need to be tapped.

> Describe the areas you found most difficult to improve in Tech Prep support and counseling services. Please explain why you think they were.

Consortia reported as the greatest difficulty the perception that Tech Prep was not needed. Staff time was reportedly scarce, allowing little time to implement individual plans for all students. Consortia reported the need to educate parents and spread the message of the value of a technical education.

MRDC, University of Minnesota © 1994

Minnesota Tech Prep Consortia Evaluation System
1993/94 Cohort Self-Assessment Summary Report

Retrospective - Overall Planning

Planning

What strategies worked best during the overall planning process for implementing Tech Prep in the schools throughout your consortium?

The key to successful planning for Tech Prep was the active involvement of a broad range of stakeholders: schools, districts, superintendents, post-secondary institutions, business, industry, labor, and the greater community. Despite the importance of a broad-based participation in planning, consortium suggest that consortia leadership should not micro-manage, but provide training, time, materials, and other resources to local teachers, administrators, and other staff to implement Tech Prep. This includes the ability to let individuals learn from their mistakes. In addition, the use of the ADVANCE curriculum and PER processes proved useful.

What pitfalls would you caution a new consortium about when planning to implement a Tech Prep initiative?

Implementing Tech Prep is a long-term project that requires continuous monitoring, modification and adjustment. Adequate funding, a clear, yet flexible strategic plan, and balance of roles between secondary and post-secondary sectors are vital. It is crucial to overcome the preconceived notion of Tech Prep as a second-class program for those not headed to a four-year institution. Good marketing, coalition-building, and broad-based participation can increase acceptance of Tech Prep.

MRDC, University of Minnesota © 1994

Implementation

What difficulties in implementing Tech Prep plans did you not anticipate and would revise if you had it to do over again?

A major difficulty in implementing Tech Prep was seen as the unexpectedly high level of effort and resources required for successful planning and implementation. Shifting priorities regarding implementation due to the evolving nature of Tech Prep, difficulties integrating various stakeholders' perspectives, and outside events that channeled energy and resources away from the program resulted in slow-downs in implementation. Successful Tech Prep implementation requires buy-in of all stakeholders, a process that is not accomplished overnight. Even supporters are overworked. Setting realistic expectations and allowing for temporary slow-downs due to outside interferences help keep people motivated. One consortium reported the local school board's lack of support for the school-to-work portion and suggested that business and industry representatives work closer with school board members.

When implementing the total Tech Prep program, in what areas did you experience the least problems and why? (ex., curriculum, articulation, timelines?)

Those elements of Tech Prep that were readily supported by stakeholders and that could utilize existing structures were easiest to implement. Examples are articulation of specific programs and integration, agreement on advanced standing credit, and sharing of resources among departments and levels. One consortium reported success with career clustering and the development of counseling material with the help of counseling staff. The availability of CORD materials helped implementation by minimizing need for local program development.

Continuous Improvement

In which areas of activity during the implementation of Tech Prep did your consortium make the greatest improvements? Why?

Greatest improvements were reported in articulation and integration, communication between secondary and post-secondary sectors, and the increase in awareness of the value of a two-year degree. The general acceptance and support of Tech Prep by staff, including counselors, was also reported.

MRDC, University of Minnesota © 1994

In which areas of activity during the implementation of Tech Prep does your consortium need to make the most improvement in the future? Why?

Several consortia identified the establishment of working models for ongoing active involvement of business and industry and the general public as the most difficult task. Other consortia reported the need for clearer identification of Tech Prep career paths, increases in funding to revise and refine ongoing initiatives, especially continuous staff development, marketing, and articulation processes. There is also a need for finding or developing better assessment tools, and for improved, ongoing communication of Tech Prep to all stakeholders.

MRDC, University of Minnesota © 1994

Section III

Minnesota Tech Prep Consortia Evaluation System

Peer Brainstorming Session

MRDC, University of Minnesota © 1994

MN Tech Prep Consortia Evaluation System
Peer Brainstorming Session
December 14, 1994
9 a.m. - 12:30 p.m., R 380 VoTech Education Building,
University of Minnesota, St. Paul Campus

Present:
Representing the MRDC:
Jim Brown, Professor and Director of MRDC, Department of Vocational and Technical Education
Dave Pucel, Professor and Head of Division of Industrial Education, Department of Vocational and Technical Education
Rebecca Johnson, Research Assistant
Peter Kuchinke, Research Assistant
Representing the State Board of Technical Colleges:
Mary Jacquart, Tech Prep Manager
Representing the Minnesota Department of Education:
Tom Ryerson, Specialist-Tech Prep/Industrial Technology
Dolores Pospesel, Student Information Manager
John Sedey, Project Systems Manager
Representing Brainerd/Staples Regional Technical College Tech Prep Program:
Sue Boehland
Representing East Central MN Tech Prep Consortium:
Lyndon Hagestuen
Representing Northeast Metro Tech Prep Consortium:
Bill Knaak
Dan Smith
Gordon Williams
Representing Rochester Area Tech Prep Consortium:
Carol Backstrom
Representing Northwest MN Tech Prep Consortium:
Esther Gallagher (for Bev Arnston)

Consortia Not Represented:
Northeast MN Tech Prep Consortium
West Central ECSU Tech Prep Consortium

Summary
Representatives from five of the seven consortia that had completed the self-evaluation in 1994, the Tech Prep Manager, and representatives from the Minnesota Department of Education participated in a peer brainstorming session conducted by the MRDC, the third party evaluator of the Minnesota Tech Prep System.

The session was designed to

- check the accuracy of the MRDC Self-Assessment Summary document,
- review the status of each consortium's Tech Prep activities against a peer group benchmark,
- share successful and unsuccessful practices to inform peers and new consortia, and
- provide feedback to the MRDC on the Self-Assessment Summary and Report processes.

The results of the session will be incorporated into the final Self-Assessment Summary Report and distributed by the MRDC.

Drs. Brown and Pucel conducted the session by discussing the seven activities included in each of the four Tech Prep Systems. The session was structured to allow participants approximately ten minutes to re-read the particular section of the self-assessment summary report, and then to brainstorm ideas about best practices and areas for improvement.

The following is a verbatim transcript of the ideas, issues, recommendations, and concerns raised by the participants and captured on wall-charts during the session. Comments are organized by System Activities within each Tech Prep System.

CURRICULUM AND INSTRUCTION

Overall Planning

- Need to recognize variances between schools; each school is at a different level; as years progress, differences widen rather than lessen, this requires a variety of activities.
- Need to adapt to national and federal changes in Tech Prep. What's ahead?
- Look at the "big picture".
- Activities of consortia will change over time depending upon developmental status.

Staff Development

- Use of focus groups within high school programs was found to be more effective than simply attending conferences.
- Team approach to development is more effective than concentrating on individuals.
- School leadership needs to be included for successful staff development.
- Develop "in school" focus. Embrace Tech Prep program.
- Familiarize teachers with business and industry through tours, visits, and discussions.

CURRICULUM AND INSTRUCTION (cont'd)

Curriculum Integration

- Limited resources make it difficult to implement team teaching.
- Several years are needed to integrate other programs.
- Counselors influence entry of students into programs.
- Materials developed for special needs students are being used in regular classes.
- Tech Prep is viewed as lower status because of the "applied" title preceding some courses, i.e., applied math, especially by parents.
- Important that Tech Prep is not watered-down curriculum.
- Work-based learning component needs to be increased in next phase of consortia development.

Special Populations

- Involve supplemental resources, such as tutors in classrooms; team teach.
- A lot of special education programs are using Tech Prep curricula and instructional techniques.
- Some parents assume "applied" courses are for low ability students.
- Some courses are "bottom half" not the "middle 50%".

Articulation

- Meetings between technical colleges and secondary schools (face-to-face) is very helpful.
- The Minnesota Technical College Curriculum Model helps with articulation because both educational systems use the same system and can compare courses easier.
- Much variation in the extent of secondary and post-secondary collaboration.
- Post-secondary institutions are sometimes skeptical of secondary efforts.

Partnerships

- Partnerships need to be related to national trends/legislation.
- Parental involvement and perceptions are important.
- Counselors are quite powerless in curriculum and instruction, yet they decide what students go into which curriculum areas.
- Must work through difficulties between secondary academic teachers and vocational instructors.
- Significant work site involvement is needed. What are students going to need on the job, "education in action".
- Important to enhance the work component in the future.

Evaluation

- Difficult to evaluate curriculum and instruction because Tech Prep students haven't graduated yet.
- Extent to which students are better prepared to enter post-secondary programs will be an important criterion.

MRDC, University of Minnesota © 1994

MARKETING

Overall Planning

- What is marketing? Consortia experienced difficulty defining term. How can information be put onto paper?
- Clarify definition of Tech Prep. Some have strong identification, others less.
- One example of the difficulty with marketing is that counselors don't see themselves as "marketeers", selling a product. They are there to present all the options to students to allow them to make a choice.
- Some marketing has been effective but there are various views on Tech Prep.
- Sessions with PR people and counselors were not effective, because of the differences in perspectives of each group.
- The Parent Brochure and Student Brochure in which a high school could insert its own name was an effective internal marketing tool.
- Differentiate counselors' roles in marketing vs. sharing information.
- Most teachers assume everyone will go to college because that is the system they came through, need to broaden their view.
- Use the increase of BAs who don't have jobs to market as a need to look to other ways which lead to good jobs.
- Need to inform people what occupations are out there and what skills are needed.
- Work with media to get the message across.

Staff Development

- Need to emphasize a unified concept of Tech Prep.
- Identify role of marketing. Increase self-initiative, marketing within their own structure.
- Broaden picture of availability of employment options beyond the local level, i.e., statewide.
- Use student anecdotes, hear from past students.
- Use other teachers to broaden attitude.

Curriculum Integration

- Curriculum integration is a way to involve special populations, important to be inclusive through participation in Tech Prep classes.
- Team teaching between academic and vocational education to expose students to skills and remove myths surrounding vocational education.
- Early planning, career exploration in middle school, K-12.
- Teach career decision making skills.
- Encouraging everyone to take technical classes.
- This is a way to involve secondary and post-secondary levels, some states mandate it.

MARKETING (cont'd)

Special Populations

- Marketing views often suggest that special populations means special needs, need to broaden understanding to include gifted and talented.
- How do you market to special populations without perpetuation of favoritism to special education programs?
- How do you balance accessibility without jeopardizing public image of Tech Prep?
- Shouldn't assume special populations equal slow learners.
- Emphasis on integration of Tech Prep to improve Tech Prep's ability to accommodate a wider range of students.
- Are incarcerated populations ignored?
- Important to achieve a balance in applied courses. How? Usually the lower 1/2 are in these classes instead of the middle.
- Concerns with early intervention.

Articulation

- Students need to market.
- Technical colleges are concerned with increasing and the flow of students.
- Media impact on career opportunities has increased student awareness and interest.
- Only locally available Tech Prep programs are considered by prospective students, no state-wide sites considered.

Partnerships

- Parents are critical in marketing because students are influenced at home. ("Where are you going to college? What are you going to do after high school?" etc.) Need to get Tech Prep into those conversations.
- Promote benefits of Tech Prep through availability of jobs and good salaries through variety of media.
- Partner with earlier grades. Need to start targeting middle school students, get them thinking about careers in order to change attitudes.
- Alternatives to college are not part of the mainstream media. For example, in T.V. sitcoms the kids are always going off to college, no other options are presented. This heavily influences what kids do.
- One consortium features Tech Prep in the "teen beat" section of the local paper on a regular basis.
- Overcome "stigma" of vocational education.

Evaluation

- Evaluation is easier if Tech Prep consortia identify who their target populations/students are.

MRDC, University of Minnesota © 1994

STUDENT ASSESSMENT AND EVALUATION

Overall Planning

- What is SA &E? Defined as readiness, basic skills, and program evaluation. But is this how it was interpreted?
- Probably least known of the evaluation areas.
- Consortia suffered from not being able to define who's a Tech Prep student and identifying them. "It's difficult to assess when you don't know who to assess."
- Problems with MN Graduation Rule fluctuating and not providing as much direction as needed.
- This is the area that was least addressed by consortia.
- SA & E could be used for marketing.
- Time constraints. How much time do teachers and administrators have to do research?

Staff Development

- Research and use of data.
- Credentialing.

Curriculum Integration

- Everyone wants "seamless" integration, so you can't identify who is a Tech Prep student and who isn't, everyone is better prepared for post-secondary education.
- Improvement of academic performance.
- What types of students are enrolled in applied courses?

Special Populations

- This was the easiest area for student assessment and evaluation because it is mandated by law.
- Coordination with Perkins is difficult between basic and Tech Prep funding.

Articulation

- Concern with elements of courses, consistency, number of units, prerequisites, etc.
- Tie into movement of job/work.
- Identify vocational education students and movement within secondary through post-secondary.

Partnerships

- Tie to SREB efforts? (School to work). National collaboration efforts.
- How do we tie to business and industry?
- Close relationship with other Perkins activities.

STUDENT ASSESSMENT AND EVALUATION (cont'd)

Evaluation

- Difficult to answer when no students have been through the entire program.
- Informal feedback shows that students in applied courses tend to have fewer discipline problems.
- SREB was used in one consortium and the assessment was very good. Was developed by Gene Bottoms and shows gains using applied curriculum.
- Numbers of Tech Prep students that continue with additional academic courses. For example, successes have been seen in non-mandatory applied math classes. 95% of students elected to take Math 2 after completing Math 1.
- Difficult because you are not always comparing "apples to apples". Not all teachers get as far through the curriculum.
- Suggest taking a national skill standards approach.
- Some consortia have intentionally avoided identifying specific Tech Prep students in order to make Tech Prep more "seamless".

SUPPORT SERVICES AND COUNSELING

Overall Planning

- General agreement that portfolio system should be used K-12.
- One consortium is looking at having faculty counseling students.
- Need to have answers to students' questions about "What am I going to do with this?"
- Counselors are influential but powerless.
- Assess counselors to determine what type of support they need.
- Create equivalent balance of services between college prep and Tech Prep students. College prep students tend to get more now.

Staff Development

- A televised event, in addition to discussion with leaders afterwards, was successful.
- Most counselors are integral, but are powerless, need support. Most would like to help.

Curriculum Integration

- Tie in with career centers.
- Math/Science partnership uses Tech Prep plan to communicate with students: "How will I use this?"

MRDC, University of Minnesota © 1994

Support Services and Counseling (cont'd)

Special Populations

- Case managers provide students with additional support. All students should have one.
- Concerns with associating Tech Prep with special populations when it is for ALL. Great fear that Tech Prep will become a dumping ground for below-average students.
- Must be careful to keep applied course enrollment of special populations below 50%, otherwise it becomes a special education program.
- There are very extreme views in this area.
- How do Tech Prep students compare with students in other programs?

Articulation

- Need a forum to get together and discuss ideas.
- All students need similar amounts and quality of student services and counseling as part of "4-year plan".

Partnerships

- Involve counselors in finding out what they need, include them in all Tech Prep discussions.
- Interface with business and industry to find positions related to the students' career interests, have a liaison person at school, similar to a placement specialist but with a broader knowledge to help answer students' questions.
- Need help of parents and administration.
- Departmental involvement with counseling and advising.

Evaluation

- Career counseling needs to follow through with students, include all information in counseling, not just college prep.
- How do you build accountability in?
- Retrospect of services received, compare Tech Prep and "regular" students.

MRDC, University of Minnesota © 1994

The following represents the results of a final feed-back segment at the end of the session. Participants were asked which aspects of the session and the self-assessment summary report were helpful, what needed improvement, and what next steps were planned.

PROCESS IMPROVEMENT

Positive Comments	Needs Improvement	Next Steps
Good to see summary of self evaluation efforts.	Self evaluation process is laborious.	Share information with consortia team members.
Tool for improvement.	More frequent self evaluations?	Finalized report to be shared with new consortia.
Will be helpful to other consortia who are starting out.	3 years is a long time to evaluate implementation efforts.	Share process with new consortia.
Can be used as a benchmark to judge progress.	MRDC to identify best practices? Target/goals?	
	Use ITV to reduce travel for short meetings.	
	Hold meetings at several sites.	
	Be less prescriptive in forming teams.	

MRDC, University of Minnesota © 1994